

CHILLER SERVICE AGREEMENT

1.0 INTENT:

The intent of this Solicitation is to award a contract for a comprehensive chiller checklist/service agreement for chillers at various locations throughout the Warren County School System, to provide inspections, test, service and repairs to the equipment and related equipment (pumps, motors, and fans).

2.0 SCOPE OF SERVICES:

2.1 Contractor shall furnish all supervision, labor, materials, equipment, tools, chemicals, transportation, and all effort necessary to perform the requirements herein. Parts shall be billed separately.

2.2 Contractor shall perform one annual comprehensive service, test and inspection during chiller shutdown season and one semi-annually comprehensive service, test and inspection during the air conditioning season.

Schedule:

- (1) March: Annual Comprehensive
- (2) End of September: Semi-Annual Comprehensive

Frequency of schedule may be altered by Warren County Schools Plant and Operations Facilities Management.

3.0 WORKING HOURS:

3.1 Service shall be made available to the Warren County Schools:

Regular business hours (Monday – Friday 7:00 AM – 3:00 PM)

After hours (Monday – Friday 3:00 PM – 7:00 AM)

Weekends (Saturday and Sunday, all hours)

- Time and Dates must be approved by the Warren County Schools, HVAC Supervisor.

4.0 SEMI-ANNUALLY FREQUENCY:

Warren County Schools Plant and Operations

Chiller: Operations and Maintenance

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Contractor shall perform semi-annually maintenance as scheduled by the Warren County Schools. A checklist of all inspections and tests performed (as listed below) shall be supplied to the Warren County Schools. Electronic checklists would be the preferred method for submission. It shall be the Contractor's responsibility to maintain the chiller (main body and all components attached to the body) and ancillary components (equipment such as but not limited to refrigerant monitors, evacuation systems) in a manner that causes the machine to be fully functional in accordance to manufacturer's and industry standards.

The following shall be the responsibility of the Contractor during the semi-annual preventive maintenance inspections if applicable:

- 4.1 Lubricate and adjust equipment as required by manufacturer's recommendations.
- 4.2 Inspection of electric wiring from the line side starter to its respective motor.
- 4.3 Inspection of refrigerant piping between two or more pieces of equipment (excluding chilled water piping) and the insulation of the piping.
- 4.4. Inspect all pressure and temperature controls, thermometers, gauges, linkages, control devices and thermostats located at equipment.
- 4.5 Inspection of the starters.
- 4.6 Check all safety switches and alarms for proper operation. This shall include, but not limited to:
 - High-pressure cutoff
 - Low-pressure cutoff
 - Low oil pressure switch
 - Oil pump timers
 - Flow switches
 - Pump interlocks
 - System monitor timers
 - System freeze stats
 - Vane closing switches
- 4.7 Check operation of all operating controls:
 - Temperature control stats
 - Motor load limit controls
 - Variable frequency drive units (if applicable)
- 4.8 Check compressor operation:
 - Performance evaluation
 - Check amperage balance

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- Check terminal lug torque
 - Check lubricating system, oil levels, and temperatures
 - Check vane operation under various loaded conditions
 - Check operation of expansion valve, superheat settings
 - Check and evaluate performance of purge compressor unit (if applicable)
- 4.9 Check operation of chiller unit:
- Leak check compressor fittings and terminals
 - Leak check purge compressor (if applicable)
 - Leak check oil pump and fittings
 - Leak check relief valves and rupture disk
- 4.10 Check operation of main starter:
- Examine contacts on all electrical connections
 - Verify overload and trip settings
 - Test all electrical connections
- 4.11 Perform additional condenser tube brushing as required.
Warren County Schools Plant and Operations approval required and to be billed as the additional brushing rates)

5.0 ANNUALLY FREQUENCY:

Provide one comprehensive annual service to include semi-annually frequency as outlined in section 4.0, and inspection on the equipment. Annual service/inspections

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shall be performed on a schedule provided by Warren County Schools Maintenance Department, and said services and inspections shall include, but not limited to:

- 5.1 Oil Analysis: This will include a full spectrum analysis to be collected under EPA guidelines. The spectrochemical analysis will test for wear and corrosion elements in the oil sample. This will include, but not limited to: iron, chromium, aluminum, lead, silicon, tin, and zinc. Reported results shall be in parts per million (ppm). The Karl Fisher method shall determine the water content of the oil.
- 5.2 Brush 100% of the condenser tubes
- 5.3 Clean / wash any air cooled coils including chemical solution as required.
- 5.4 Eddy Current Test 100% of the condenser tubes no less than one time every two (2) years. The technician performing such tests must hold a current Level 3 certification from American Standard for Nondestructive Testing (ASNT) standard SNT-TC-1A. Proof of such must accompany bid package.
- 5.5 Brush 100% of the evaporator tubes no less than one time every five (5) years
- 5.6 Eddy Current Test 100% of the evaporator tubes no less than one time every five (5) years.
- 5.7 Contractor must brush tubes before each Eddy Current Test is performed.
- 5.8 Vibration Analysis shall be conducted on a semi-annually basis and a baseline trend established, charted, and compared with the manufacturer's specifications. This trend chart shall be provided to Warren County Schools Maintenance Department as part of the semi-annually maintenance package. The technician performing such testing must hold a current Level 2 certification from American Standard for Nondestructive Testing (ASNT) standard SNT-TC-1A. Proof of such must accompany bid package.
- 5.9 Megger Insulation Test on compressor motor.
- 5.10 Complete leak check of chillers.
- 5.11 Inspect starter panel and main contacts for pitting/burring. Torque all connections and clean starter.
- 5.12 Copy of annual inspection report (Contractor's form) shall be forwarded to Warren County Schools Maintenance Department for formal review.
- 5.13 Clean or back flush heat exchanger (VSD, SSS Applications).
Replace oil filter and oil return filter/driers (external & internal).
Replace oil reclaim filter/strainer (when applicable).

6.0 DOES NOT INCLUDE

It is understood that the service and maintenance provided for herein DOES NOT include the following:

- 6.1 Responsibility for equipment room conditions or overall system performance.
- 6.2 Supplying, changing or cleaning air filters.

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- 6.3 Piping other than refrigerant piping.
- 6.4 Air distribution system, including ductwork and fan casings.
- 6.5 Damage due to freezing weather.
- 6.6 Water treatment and acid cleaning.
- 6.7 Corrosion or erosion damage to water, brine, process or steam side of equipment.
- 6.8 Disconnect switches and circuit breakers.
- 6.9 Complementary equipment (for example, but not confined to, the following: cabinets, fixtures, boxes, water supply lines, drain lines and steam lines).
- 6.10 Water treatment at the chiller sites shall be performed by a qualified water treatment firm and shall be the responsibility of the Warren County Schools.

The Contractor will notify Warren County Schools Maintenance Department of any worn parts found during the maintenance service work to maintain the chillers in good working condition.

7.0 WARRANTY

The minimum warranty period shall be twelve months (12) months for parts; six (6) months for labor. Warranty repair and/or replacement shall be performed at no additional charge to the Warren County Schools. All warranty periods shall begin upon acceptance by the Using Agency

8.0 MANDATORY CONTRACTOR QUALIFICATIONS:

- 8.1 Contractor shall be Chiller authorized to perform maintenance, repairs, - and retrofits and warranty service on commercial and industrial chillers. They must also be able to provide and maintain current technical data, diagnostic tools and have access to all change notifications pertaining to chillers.
- 8.2 The Contractor shall hold all required licenses and permits as go governed by the State of Tennessee. Contractor must have a State of Tennessee

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Commercial Air Conditioning and Refrigeration license L-39. A copy of such must accompany bid package.

- 8.3 ASNT Levels 2 and 3 certified employees for performance of PM Inspection Proof of such must accompany bid package.
- 8.4 All technicians assigned to this contract must be certified to work on chillers. Proof of such must accompany bid package.
- 8.5 SSTA Certification: Each technician assigned to this contract MUST have SSTA (Southwest Safety Training Alliance) certification. The purpose of this certification is to ensure all technical staff has received safety training that meets the OSHA Construction Safety standards (29CFR1926), and the OSHA General Industry standards(OSHA 29CFR1910). If the contractor/bidder is currently certified, please submit copies of certification cards of all technicians who will be assigned to this contract. If the contractor/bidder is not currently certified, the contractor/bidder has sixty (60) days after award to obtain certification for its technicians assigned to this contract, and must submit copies of certification cards to the Office of Procurement Services upon completion of certification. Failure to provide this information after award will render the contractor in default of contract. All contractor new hires assigned to this contract must meet the same requirements.

9.0 CONTRACTOR REQUIREMENTS:

- 9.1 Required background checks: A background check shall be a requirement for all employees of Contractor's staff providing services to the Warren County Schools.
- 9.2 Employees of the Contractor
No one except authorized employees of the Contractor is allowed on the premises of Warren County School Buildings. Contractor's employees are NOT to be accompanied in their work area by acquaintances, family members, assistants, or any other person unless said person is an authorized employee of the Contractor.
- 9.3 Contractor MUST comply with all Federal E.P.A. and O.S.H.A. guidelines in effect for each service occurrence.
- 9.4 The Contractor shall perform the work in a way to minimize disruption to the normal operation of building tenants. Upon completion of work the Contractor is responsible for cleaning and removing from the job site all debris, materials and equipment associated with the work performed.
- 9.5 The Contractor shall make necessary repairs to the equipment in such a manner that does not damage Warren County Schools property. In the event damage occurs to Warren County Schools property, or any adjacent property by reason of any repairs or installations performed under this Contract, the Contractor shall replace or repair the same at no cost to the Warren County Schools. If damage

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caused by the Contractor has to be repaired or replaced by the Warren County Schools, the cost of such work shall be deducted from the monies due the Contractor.

9.6 In the event the work performance of the Contractor is unsatisfactory, the Contractor will be notified by Warren County Schools and be given 4 hours to correct the work. Labor for all re-work will be at no cost to the Warren County Schools. Any additional parts replaced shall be billed at contract pricing.

10.0 CONTRACT TERM:

This Invitation for Bid is for awarding a firm, fixed price purchasing contract to cover a three (3) year period.

11.0 OPTION TO EXTEND:

The Warren County Schools may, at their option and with the approval of the Contractor, extend the period of this Contract up to a maximum of three (3), one (1) year options, (or at the Warren County Schools sole discretion, extend the contract on a month to month basis for a maximum of six (6) months after expiration). The Contractor shall be notified in writing by the Warren County Schools Maintenance Department of the Warren County Schools intention to extend the contract period at least thirty (30) calendar days prior to the expiration of the original contract period.

12.0 PRICE ADJUSTMENTS:

Any requests for reasonable price adjustments must be submitted sixty (60) days prior to the Contract annual anniversary. Requests for adjustment in cost of labor and/or materials must be supported by appropriate documentation. If Warren County Schools agrees to the adjusted price terms, Warren County Schools shall issue written approval of the change. The reasonableness of the request will be determined by comparing the request with the (Consumer Price Index) or by performing a market survey.

13.0 INDEMNIFICATION

To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold harmless Warren County Schools, its agents, representatives, officers, directors, officials, and employees from and against all claims, damages, losses and expenses, including, but not limited to, attorney fees, court costs, expert witness fees, and the cost of appellate proceedings, relating to, arising out of, or alleged to have resulted from the negligent acts, errors, omissions or mistakes relating to the performance of this Contract. Contractor's duty to defend, indemnify and hold harmless Warren County Schools, its agents, representatives, officers, directors, officials, and employees shall arise in connection with any claim, damage, loss or expense that is attributable to bodily injury, sickness, disease, death, or injury to, impairment, or destruction of property,

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including loss of use resulting there from, caused by any negligent acts, errors, omissions or mistakes in the performance of this Contract including any person for whose acts, errors, omissions or mistakes Contractor may be legally liable. The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph. The scope of this indemnification does not extend to the sole negligence of Warren County Schools.

14.0 INSURANCE REQUIREMENTS

Contractor, at Contractor's own expense, shall purchase and maintain the herein stipulated minimum insurance from a company or companies duly licensed by the State of Tennessee. In lieu of State of Tennessee licensing, the stipulated insurance may be purchased from a company or companies, which are authorized to do business in the State of Tennessee, provided that said insurance companies meet the approval of Warren County Schools. The form of any insurance policies and forms must be acceptable to Warren County Schools. All insurance required herein shall be maintained in full force and effect until all work or service required to be performed under the terms of the Contract is satisfactorily completed and formally accepted. Failure to do so may, at the sole discretion of Warren County Schools, constitute a material breach of this Contract. Contractor's insurance shall be primary insurance as respects Warren County Schools.

Any failure to comply with the claim reporting provisions of the insurance policies or any breach of an insurance policy warranty shall not affect the Warren County Schools right to coverage afforded under the insurance policies. The insurance policies may provide coverage that contains deductibles or self-insured retentions.

Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to Warren County Schools under such policies. Contractor shall be solely responsible for the deductible and/or self-insured retention and Warren County Schools, at its option, may require Contractor to secure payment of such deductibles or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit. Warren County Schools reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. Warren County Schools shall not be obligated, however, to review such policies and/or endorsements or to advise Contractor of any deficiencies in such policies and endorsements, and such receipt shall not relieve Contractor from, or be deemed a waiver of Warren County Schools right to insist on strict fulfillment of Contractor's obligations under this Contract. The insurance policies required by this Contract, except Workers' Compensation, and Errors and Omissions, shall name

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Warren County Schools, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

The policies required hereunder, except Workers' Compensation, and Errors and Omissions, shall contain a waiver of transfer of rights of recovery (subrogation) against Warren County Schools, its agents, representatives, officers, directors, officials and employees for any claims arising out of Contractor's work or service.

15.0 COMMERCIAL GENERAL LIABILITY:

Commercial General Liability insurance and, if necessary, Commercial Umbrella insurance with a limit of not less than \$1,000,000 for each occurrence, \$2,000,000 Products/Completed Operations Aggregate, and \$2,000,000 General Aggregate Limit.

The policy shall include coverage for bodily injury, broad form property damage, personal injury, products and completed operations and blanket contractual coverage, and shall not contain any provision which would serve to limit third party action over claims. There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion, collapse, or underground property damage.

16.0 AUTOMOBILE LIABILITY:

Commercial/Business Automobile Liability insurance and, if necessary, Commercial Umbrella insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to any of the Contractor's owned, hired, and non-owned vehicles assigned to or used in performance of the Contractor's work or services under this Contract.

17.0 WORKERS' COMPENSATION

Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor's employees engaged in the performance of the work or services under this Contract; and Employer's Liability insurance of not less than \$100,000 for each accident, \$100,000 disease for each employee, and \$500,000 disease policy limit. (N.B. - \$1,000,000 limits on larger contracts)

Contractor waives all rights against Warren County Schools and its agents, officers, directors and employees for recovery of damages to the extent these damages are covered by the Workers' Compensation and Employer's Liability or commercial umbrella liability insurance obtained by Contractor pursuant to this Contract.

18.0 CERTIFICATES OF INSURANCE

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Prior to commencing work or services under this Contract, Contractor shall furnish the Warren County Schools with certificates of insurance, or formal endorsements as required by the Contract in the form provided by the Warren County Schools, issued by Contractor's insurer(s), as evidence that policies providing the required coverage, conditions and limits required by this Contract are in full force and effect. Such certificates shall identify this contract number and title. In the event any insurance policy (ies) required by this contract is (are) written on a "claims made" basis, coverage shall extend for two years past completion and acceptance of Contractor's work or services and as evidenced by annual Certificates of Insurance.

If a policy does expire during the life of the Contract, a renewal certificate must be sent to Warren County Schools fifteen (15) days prior to the expiration date.

19.0 CANCELLATION AND EXPIRATION NOTICE.

Insurance required herein shall not be permitted to expire, be canceled, or materially changed without thirty (30) days prior written notice to the Warren County Schools.

CHILLERS

NO.	SITE	ADDRESS	BRAND	MODEL NO	TONS	TYPE	REF.
1	Middle School	200 Caldwell St. McMinnville	Carrier	30GT-210-610KA	210	Air Cooled	R22
2	Middle School	200 Caldwell St. McMinnville	Carrier	30GT-210-610KA	210	Air Cooled	R22
3	Hickory Creek	270 Pioneer Ln McMinnville	Carrier	30GT-190-610KA	190	Liquid chiller	R22
4	High School	190 Pioneer Ln McMinnville	McQuay	AG5270B27-ER10	270	Air Cooled	R134
5	High School	190 Pioneer Ln McMinnville	York	YLAA0140	140	Air Cooled	410A
6	High School	190 Pioneer Ln McMinnville	York	YLAA0140	140	Air Cooled	410A

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1. Middle School
200 Caldwell Street
McMinnville, TN
2. Hickory Creek
270 Pioneer Lane
McMinnville, TN
3. High School
190 Pioneer Lane
McMinnville, TN

Contact Person: David Northcutt
Warren County Schools Maintenance Department
HVAC Supervisor
(931) 668-1246

Bid Tab Sheet

Name of Company: _____

Address: _____

Phone Number: _____

Contact Person: _____

N0.	Site	Bid Amount
1	Middle School	
2	Middle School	

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3	Hickory Creek	
4	High School	
5	High School	
6	High School	
Total		

Signature: _____

Date: _____